

TVPPA Perspective: Energy Efficiency & Demand Reduction

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- Introduction to TVPPA
 - Purpose
 - Governance
 - Committee Structure
- EE/DR Membership Resolution
- TVPPA EE/DR Guiding Principles
- TVPPA/TVA Collaboration

TENNESSEE VALLEY PUBLIC POWER ASSOCIATION, INC.

- Organized in 1946
- Membership:
 - Serves portions of 7 SE states
 - 108 municipal electric systems
 - 50 electric cooperatives
 - Together, these members provide electricity to more than 8.5 million end-use customers
 - *30 Affiliate and 44 Associate* members
- Serves as advocate for member interests
 - Political process
 - TVA
 - Public

- Represent member interests to TVA, Congress, & public constituents
- Promote common interests & collective efficiencies of members
- Provide education/training opportunities for member employees
- Facilitate cooperation & information exchange with members, other organizations
- Coordinate activities with district power distributor associations & other state/regional public power organizations

- 19-member Board of Directors
 - One cooperative and one municipal representative from each of 7 district associations
 - Five at-large board seats
 - Three from “Big 8”
 - “Big 8” consists of 8 largest power distributors in the Valley
 - Two other seats elected “at-large”

- Executive Committee
- Steering Committee
- Rates & Contracts Committee
- **Energy Services Committee – oversees EE/DR activities**
- Technology Applications Committee
- Economic Development Committee
- Government Relations Policy Committee
- Operations Coordination Committee
- Education & Training Committee
- Research & Development Committee
- Joint Use Committee
- Valley Supply Chain Committee
- Resolutions Committee

Energy Services Mission Statement:

“To **represent** power distributors by providing **oversight** and **guidance** to TVA in the **creation** and delivery of energy services, products and programs that help achieve agreed upon goals **beneficial** to consumers in the Tennessee Valley.”

Key Words of Emphasis:

- Represent
- Oversight
- Guidance
- Creation
- Beneficial

**“In Support Of Energy Efficiency” membership
resolution adopted May 2009:**

- Fundamentally, power distributors have an ongoing responsibility to promote the prudent and wise use of electricity
- Implemented programs must be real, attainable and measurable.
- TVPPA & TVA should collectively design wholesale rate structures to encourage appropriate use of energy and capacity resources, while ensuring that reliability and cost-effective rates are maintained.

TVPPA members support EE, *and*:

- Encourage customer participation in energy efficiency programs collaboratively designed by TVPPA & TVA;
- Urge continued cooperation between TVPPA & TVA as programs are finalized and initiated Valleywide;
- Urge prudent use of resources within or without the context of an official energy efficiency program;
- Recognize that a “one-size fits all” approach may not work.

- Adoption of energy efficiency and demand response as a joint stewardship philosophy is the right thing to do for meeting the load requirements in the Tennessee Valley.
- Effective energy efficiency and demand response programs must be developed jointly with options to meet the diverse needs of distributors and end-use customers.
- Energy efficiency and demand response programs will require a long-term commitment of resources to ensure that desired objectives are achieved.

- EE/DR alternatives will be considered as “clean” options when the need for any new generation is under consideration, and will aggressively be pursued as qualifying environmental credits.
- EE/DR programs will demonstrate value balanced against investments by TVA, power distributors and/or end-use customers.
- Agencies that provide aid to the economically-distressed will be educated on the benefits of EE/DR, and customers will be directed to federal, state, and local agencies that can provide assistance.
- Continual education for all stakeholders will be a high priority.

Collaborative Programs & Projects:

Residential:

- Market Research & Analysis
- Do It Yourself Home Energy Audits
- In-Home Energy Evaluation
- 6% Heat Pump Financing
- HVAC Maintenance Program
- Pre-Pay Program
- Residential Direct Load Control Pilot
- New Homes Program

Industrial:

- Generation Partners Industrial Energy Efficiency Program (> 5 MW)
- Industrial Energy Efficiency Program (< 5 MW)
- Demand Response 3rd Party Aggregator

Education:

- Green Schools Program
- National Theatre for Children

Advertising:

- Key Messaging
- Branding Strategy

Other:

- Green Power Switch Program Modifications
- Preferred Partners Network Update

Additional Slides/Information

In Support Of Energy Efficiency

TVA's commitment to energy efficiency – as expressed in its 2007 Strategic Plan – calls for aggressive steps in a time-compressed fashion. The preliminary goal is to reduce TVA's future peak demand by 1,400 megawatts by 2013, with more reductions anticipated as new rates, technologies and consumer awareness programs are developed and implemented.

Energy efficiency includes conservation (using less energy), efficiency (using energy smarter) and peak shaving – (avoiding energy use when the demand is high and when power is the most expensive to produce). In addressing energy efficiency, all three of these components need to be addressed, and that will require a complicated, coordinated and concise effort among TVA, power distributors and the end-use customers.

TVPPA believes that fundamentally, power distributors have an ongoing responsibility to promote the prudent and wise use of electricity regardless of whether a "formal" program is adopted and implemented. But any programs implemented should be real, attainable and measurable.

Energy efficiency programs implemented should not detract from the low-cost reliable electricity model of the last 75 years in the Tennessee Valley. TVA distributors spend roughly 75 – 85% of revenues collected from end-use customers to purchase wholesale power from TVA. That leaves a very small margin to operate and maintain distribution systems, and to constantly upgrade systems to meet the continuing reliability requirements of customers.

Enactment of any program must not detract from a distributor's financial position, but instead, should complement it. To that end, one challenge TVA and TVPPA have is to collectively design wholesale rate structures to encourage the appropriate use of energy and capacity resources, while ensuring that reliability and cost-effective rates are maintained.

TVPPA and TVA continue to collaboratively develop energy efficiency and demand response programs, and have initiated pilot projects in the residential and commercial sectors as well as proposed enhancements to the Generation Partners program.

RESOLUTION – The members of the Tennessee Valley Public Power Association support an energy efficiency program and:

- **Encourage customer participation in energy efficiency programs collaboratively designed by TVPPA and TVA;**
- **Applaud the work of the Energy Services Committee and its various sub-groups in development of acceptable programs;**
- **Urge continued cooperation between TVA and TVPPA as programs are finalized and initiated Valley-wide;**
- **Urge prudent use of resources within or without the context of an official energy efficiency program;**

Steering Committee Guiding Principles

- Decisions regarding the development and implementation of rate structure changes, implementation of technology, and programs designed to change customer behavior will be made with the best long term interest of the end use customer in mind.
- Implementation of any programmatic changes will ensure that price signals are consistent with costs.
- TVA and TVPPA will seek to reduce iterations during the development process to bring about programmatic changes in various strategic areas through collaborative efforts.
- Implementation of any programmatic changes will provide adequate time for customer communications and process revision.
- Implementation of any programmatic changes will seek to embody simplicity.
The collective implementation costs of energy efficiency and demand response (EE/DR) initiatives, communications infrastructure and rate incentives should not exceed the savings derived from TVA's avoided marginal and embedded costs.
- TVA and TVPPA agree that net savings from avoided costs will be used to incentivize desired customer behavior.
- Implementation of any programmatic changes will consider stability and predictability in long term economic investment decisions.
- TVA and TVPPA must consider impacts on existing and new economic development efforts when designing programs to achieve energy efficiency and demand reduction goals.
- TVA must be able to demonstrate fairness and equity between distributors and direct serve customers.

Energy Services Guiding Principles

- Adoption of energy efficiency and demand response as a joint stewardship philosophy is the right thing to do for meeting the load requirements in the Tennessee Valley.
- Effective energy efficiency and demand response programs must be developed jointly with options to meet the diverse needs of distributors and end-use customers.
- Energy efficiency and demand response programs will require a long-term commitment of resources to ensure that desired objectives are achieved.
- Energy efficiency and demand response alternatives will be considered as “clean” options when the need for any new generation is under consideration, and will aggressively be pursued as qualifying environmental credits.
- Energy efficiency and demand response programs will demonstrate value balanced against investments by TVA, power distributors and/or end-use customers.
- TVA and TVPPA member utilities will cooperate with federal, state and local agencies that provide assistance to the economically distressed to ensure they are educated on the benefits of energy efficiency and demand response.
- Continual education for all stakeholders about energy efficiency and demand response will be a high priority.